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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NALEVANKO, CHRISTOPHER R

ART UNIT PAPER NUMBER

2611

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/650,329

Applicant(s)

ADAMS ET AL

Examiner

Christopher R Nalevanko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,7-9,13 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,7-9,13 and 16-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/01/2004 have been fully considered but they are not persuasive.

Regarding Claims 4, 13, 16, 20, and 24, Applicant argues that, "In contrast to Maturi, the present invention maintains synchronization between the receiver circuit and the transmitter without utilizing the host computer. As explained at page 5, lines 22-23 of the present application, this synchronization is instead accomplished completely within the receiver circuit, e.g. using firmware in a transport controller" (page 8 lines 19-22). By referring to the Applicant's cited sections for support, page 5 lines 22-23, the specification refers to fig. 1 item 108 the receiver circuit. This receiver circuit is inside the host computer 106, as shown by the figure. Therefore, when the receiver, which is a part of the host computer, is used for synchronization the host computer is necessarily being used also. This is in direct contradiction to what is claimed. Because of this contradiction, it is not understood how synchronization can take place without using the host computer when one of the vital components being synchronized resides in the host computer. Please see the 35 USC 112 1st paragraph rejections below. Prior rejections are maintained.

2. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last office action is taken as an admission of the facts noticed.

Claim Rejections - 35 USC § 112

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 4, 13, 16, 20, and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Applicant claimed limitations of “maintaining synchronization between the receiver circuit and the transmitter, without utilizing the host computer” is not supported by the specification. Furthermore, in fig. 1, the receiver circuit is part of the host computer. This directly contradicts what is claimed.

Appropriate correction is required.

4. Claim 4, 13, 16, 20, and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Applicant claimed limitations of “maintaining synchronization between the receiver circuit and the transmitter, without utilizing the host computer” is not supported by the specification. Furthermore, in fig. 1, the receiver circuit is part of the host computer. This directly contradicts what is claimed. Because of this contradiction, it is not understood how synchronization can take place without using the host computer

when one of the vital components being synchronized resides in the host computer.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 4, 7, 8, 13, 16, 17, 20, 21, 24, and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Maturi et al (5,559,999).

Regarding Claim 4, Maturi shows a method for synchronizing a digital video host system including a host computer and a receiver circuit and a decoder circuit comprising coupling the receiver circuit with the decoder circuit only through separate nodes of a bus in the host computer (fig. 3 items 22, 36, 26, and 28) receiving a first transport packet from a transmitter (col. 2 lines 55-67), capturing a first system time clock timestamp at the start of receiving the first packet (col. 3 lines 20-25, 30-46, col. 7 lines 22-45, 64-67, col. 8 lines 1-15), obtaining a program clock reference timestamp (col. 5 lines 50-56), comparing the first STC timestamp to the PCR timestamp to generate comparison results (coll. 7 lines 22-45, 65-67, col. 8 lines 1-30), and adjusting the STC frequency based on the comparison results in order to maintain synchronization (col. 8 lines 37-49). Maturi shows capturing a system timestamp with the decoder (col. 7 lines 22-36) and adjusting the system timestamp with a scaled offset based on a message delay time between the

decoder and receiver to maintain synchronization (col. 7 lines 22-53, col. 8 lines 1-47). Also, Maturi shows that an application system would be coupled to the decoder circuit but not the receiver circuit (fig. 3 items 30 and 32). As seen in figure 3, the video and audio decoder circuits output data to the video presentation devices (video and audio out), therefor they are coupled to the application system. The receiver circuit ("bit-stream in" and pre-parser 22) is coupled to the decoder circuits through a bus, and is not directly coupled to the application circuit.

Regarding Claim 7, Maturi shows receiving data from the decoder into a register in a bus interface (see fig. 3, col. 3 lines 10-42) in the host computer, latching a second timestamp of the STC into another register in the bus after receiving the data (col. 3 lines 30-45, col. 5 lines 50-55, col. 6 lines 10-18, col. 7 lines 20-50), and providing the second timestamp to the decoder by way of the register (col. 7 lines 28-36, col. 8 lines 1-48). Furthermore, it is clear that this decoder performs this operation a numerous amount of times, providing multiple timestamps, in order to process and synchronize the thousands of data packets required to play a stream of video.

Regarding Claim 8, Maturi shows that the decoder is part of an audio-visual interface and the application system is an audio-visual system (col. 4 lines 40-52).

Regarding Claim 13, the limitations of the system claim has been discussed with regards to the method claim of Claim 4.

Regarding Claim 16, the limitations of the system claim has been discussed with regards to the method claim of Claim 7.

Regarding Claim 17, Maturi shows that the decoder is part of an audio-visual interface and the application system is an audio-visual system (col. 4 lines 40-52).

Regarding Claim 20, Maturi shows a method for synchronizing a digital video host system including a host computer (fig. 3 item 10), a receiver circuit and a decoder circuit (fig. 3) comprising coupling the receiver circuit with the decoder circuit only through a bus in the host computer (fig. 3 items 22, 36, 26, and 28), receiving a first transport packet from a transmitter (col. 2 lines 55-67), capturing a first system time clock timestamp at the start of receiving the first packet (col. 3 lines 20-25, 30-46, col. 7 lines 22-45, 64-67, col. 8 lines 1-15), obtaining a program clock reference timestamp (col. 5 lines 50-56), comparing the first STC timestamp to the PCR timestamp to generate comparison results (coll. 7 lines 22-45, 65-67, col. 8 lines 1-30), and adjusting the STC frequency based on the comparison results in order to maintain synchronization (col. 8 lines 37-49). Maturi shows capturing a system timestamp with the decoder (col. 7 lines 22-36) and adjusting the system timestamp with a scaled offset based on a message delay time between the decoder and receiver to maintain synchronization (col. 7 lines 22-53, col. 8 lines 1-47). Maturi shows receiving data from the decoder into a register in a bus interface comprised by the bus in the host computer (see fig. 3, col. 3 lines 10-42), latching a second timestamp of the STC into another register in the bus after receiving the data (col. 3 lines 30-45, col. 5 lines 50-55, col. 6 lines 10-18, col. 7 lines 20-50), and providing the second timestamp to the decoder by way of the register (col. 7 lines 28-36, col. 8 lines 1-48). Furthermore, it is clear that this decoder performs this operation a

numerous amount of times, providing multiple timestamps, in order to process and synchronize the thousands of data packets required to play a stream of video.

Regarding Claim 21, Maturi shows that the decoder is part of an audio-visual interface (col. 4 lines 40-52).

Regarding Claim 24, the limitations of the claim have been discussed with regards to Claim 20.

Regarding Claim 25, Maturi shows that the decoder is part of an audio-visual interface (col. 4 lines 40-52).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9, 18, 22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maturi et al.

Regarding Claims 9 and 18, Maturi fails to show that the decoder is part of a computer network interface and the application system is a networked computer system. Official Notice is taken that it is well known and expected in the art for a decoder to be included in a computer network. This allows the network to send MPEG data in order to display video. Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to include the decoder in a computer network interface so that the computer network could decode and display MPEG data.

Regarding Claim 22, Maturi fails to show that the decoder is part of a computer network interface. Official Notice is taken that it is well known and expected in the art for a decoder to be included in a computer network. This allows the network to send MPEG data in order to display video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the decoder in a computer network interface so that the computer network could decode and display MPEG data.

Regarding Claim 26, Maturi fails to show that the decoder is part of a computer network interface. Official Notice is taken that it is well known and expected in the art for a decoder to be included in a computer network. This allows the network to send MPEG data in order to display video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the decoder in a computer network interface so that the computer network could decode and display MPEG data.

7. Claims 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maturi et al in further view of Dokic (5,699,392).

Regarding Claim 19, Maturi shows that adjustments are made with an offset but fails to show that this offset is scaled by a non-unitary value. Dokic shows using a scale factor to change a correction factor (col. 9 lines 50-65). This scale factor can be a wide

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variety of values, depending on the situation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Maturi with the scaling ability of Dokic so that the system could handle a wide range of synchronization errors.

Regarding Claim 23, the limitations of the claim have been discussed with regards to Claim 19.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Nalevanko whose telephone number is 703-305-8093. The examiner can normally be reached on M-F 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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